

## SEQUENCE LISTING

&lt;110&gt; ZENSUN(SHANGHAI)SCIENCE AND TECHNOLOGY LIMITED

&lt;120&gt; ERBB3 BASED METHODS AND COMPOSITIONS FOR TREATING NEOPLASMS

&lt;130&gt; 52401-20003.00

&lt;160&gt; 16

&lt;170&gt; FastSEQ for Windows Version 4.0

&lt;210&gt; 1

&lt;211&gt; 1342

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1

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Met Arg Ala Asn Asp Ala Leu Gln Val Leu Gly Leu Leu Phe Ser Leu
  1             5             10             15
Ala Arg Gly Ser Glu Val Gly Asn Ser Gln Ala Val Cys Pro Gly Thr
      20             25             30
Leu Asn Gly Leu Ser Val Thr Gly Asp Ala Glu Asn Gln Tyr Gln Thr
      35             40             45
Leu Tyr Lys Leu Tyr Glu Arg Cys Glu Val Val Met Gly Asn Leu Glu
      50             55             60
Ile Val Leu Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile
      65             70             75             80
Arg Glu Val Thr Gly Tyr Val Leu Val Ala Met Asn Glu Phe Ser Thr
      85             90             95
Leu Pro Leu Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp
      100            105            110
Gly Lys Phe Ala Ile Phe Val Met Leu Asn Tyr Asn Thr Asn Ser Ser
      115            120            125
His Ala Leu Arg Gln Leu Arg Leu Thr Gln Leu Thr Glu Ile Leu Ser
      130            135            140
Gly Gly Val Tyr Ile Glu Lys Asn Asp Lys Leu Cys His Met Asp Thr

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145                      150                      155                      160  
 Ile Asp Trp Arg Asp Ile Val Arg Asp Arg Asp Ala Glu Ile Val Val  
                                  165                      170                      175  
 Lys Asp Asn Gly Arg Ser Cys Pro Pro Cys His Glu Val Cys Lys Gly  
                                  180                      185                      190  
 Arg Cys Trp Gly Pro Gly Ser Glu Asp Cys Gln Thr Leu Thr Lys Thr  
                                  195                      200                      205  
 Ile Cys Ala Pro Gln Cys Asn Gly His Cys Phe Gly Pro Asn Pro Asn  
                                  210                      215                      220  
 Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys Ser Gly Pro Gln Asp  
 225                      230                      235                      240  
 Thr Asp Cys Phe Ala Cys Arg His Phe Asn Asp Ser Gly Ala Cys Val  
                                  245                      250                      255  
 Pro Arg Cys Pro Gln Pro Leu Val Tyr Asn Lys Leu Thr Phe Gln Leu  
                                  260                      265                      270  
 Glu Pro Asn Pro His Thr Lys Tyr Gln Tyr Gly Gly Val Cys Val Ala  
                                  275                      280                      285  
 Ser Cys Pro His Asn Phe Val Val Asp Gln Thr Ser Cys Val Arg Ala  
                                  290                      295                      300  
 Cys Pro Pro Asp Lys Met Glu Val Asp Lys Asn Gly Leu Lys Met Cys  
 305                      310                      315                      320  
 Glu Pro Cys Gly Gly Leu Cys Pro Lys Ala Cys Glu Gly Thr Gly Ser  
                                  325                      330                      335  
 Gly Ser Arg Phe Gln Thr Val Asp Ser Ser Asn Ile Asp Gly Phe Val  
                                  340                      345                      350  
 Asn Cys Thr Lys Ile Leu Gly Asn Leu Asp Phe Leu Ile Thr Gly Leu  
                                  355                      360                      365  
 Asn Gly Asp Pro Trp His Lys Ile Pro Ala Leu Asp Pro Glu Lys Leu  
                                  370                      375                      380  
 Asn Val Phe Arg Thr Val Arg Glu Ile Thr Gly Tyr Leu Asn Ile Gln  
 385                      390                      395                      400  
 Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu Thr  
                                  405                      410                      415  
 Thr Ile Gly Gly Arg Ser Leu Tyr Asn Arg Gly Phe Ser Leu Leu Ile  
                                  420                      425                      430  
 Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser Leu Lys Glu  
                                  435                      440                      445

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Ile Ser Ala Gly Arg Ile Tyr Ile Ser Ala Asn Arg Gln Leu Cys Tyr
  450                      455                      460
His His Ser Leu Asn Trp Thr Lys Val Leu Arg Gly Pro Thr Glu Glu
  465                      470                      475                      480
Arg Leu Asp Ile Lys His Asn Arg Pro Arg Arg Asp Cys Val Ala Glu
                      485                      490                      495
Gly Lys Val Cys Asp Pro Leu Cys Ser Ser Gly Gly Cys Trp Gly Pro
                      500                      505                      510
Gly Pro Gly Gln Cys Leu Ser Cys Arg Asn Tyr Ser Arg Gly Gly Val
                      515                      520                      525
Cys Val Thr His Cys Asn Phe Leu Asn Gly Glu Pro Arg Glu Phe Ala
                      530                      535                      540
His Glu Ala Glu Cys Phe Ser Cys His Pro Glu Cys Gln Pro Met Glu
  545                      550                      555                      560
Gly Thr Ala Thr Cys Asn Gly Ser Gly Ser Asp Thr Cys Ala Gln Cys
                      565                      570                      575
Ala His Phe Arg Asp Gly Pro His Cys Val Ser Ser Cys Pro His Gly
                      580                      585                      590
Val Leu Gly Ala Lys Gly Pro Ile Tyr Lys Tyr Pro Asp Val Gln Asn
                      595                      600                      605
Glu Cys Arg Pro Cys His Glu Asn Cys Thr Gln Gly Cys Lys Gly Pro
                      610                      615                      620
Glu Leu Gln Asp Cys Leu Gly Gln Thr Leu Val Leu Ile Gly Lys Thr
  625                      630                      635                      640
His Leu Thr Met Ala Leu Thr Val Ile Ala Gly Leu Val Val Ile Phe
                      645                      650                      655
Met Met Leu Gly Gly Thr Phe Leu Tyr Trp Arg Gly Arg Arg Ile Gln
                      660                      665                      670
Asn Lys Arg Ala Met Arg Arg Tyr Leu Glu Arg Gly Glu Ser Ile Glu
                      675                      680                      685
Pro Leu Asp Pro Ser Glu Lys Ala Asn Lys Val Leu Ala Arg Ile Phe
                      690                      695                      700
Lys Glu Thr Glu Leu Arg Lys Leu Lys Val Leu Gly Ser Gly Val Phe
  705                      710                      715                      720
Gly Thr Val His Lys Gly Val Trp Ile Pro Glu Gly Glu Ser Ile Lys
                      725                      730                      735
Ile Pro Val Cys Ile Lys Val Ile Glu Asp Lys Ser Gly Arg Gln Ser

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	740		745		750
Phe	Gln	Ala	Val	Thr	Asp
		His	Met	Leu	Ala
			Ile	Gly	Ser
			Leu	Asp	His
	755		760		765
Ala	His	Ile	Val	Arg	Leu
		Leu	Gly	Leu	Cys
			Pro	Gly	Ser
			Ser	Ser	Leu
	770		775		780
Leu	Val	Thr	Gln	Tyr	Leu
		Pro	Leu	Gly	Ser
			Leu	Leu	Asp
			His	Val	Arg
	785		790		795
					800
Gln	His	Arg	Gly	Ala	Leu
			Gly	Pro	Gln
			Leu	Leu	Leu
			Asn	Trp	Gly
			Val		
	805		810		815
Gln	Ile	Ala	Lys	Gly	Met
		Tyr	Tyr	Leu	Glu
			Glu	His	Gly
			Met	Val	His
	820		825		830
Arg	Asn	Leu	Ala	Ala	Arg
		Asn	Val	Leu	Leu
			Lys	Ser	Pro
			Ser	Gln	Val
	835		840		845
Gln	Val	Ala	Asp	Phe	Gly
		Val	Ala	Asp	Leu
			Leu	Pro	Pro
			Asp	Asp	Lys
	850		855		860
Gln	Leu	Leu	Tyr	Ser	Glu
		Ala	Lys	Thr	Pro
			Ile	Lys	Trp
			Met	Ala	Leu
	865		870		875
					880
Glu	Ser	Ile	His	Phe	Gly
		Lys	Tyr	Thr	His
			Gln	Ser	Asp
			Val	Trp	Ser
	885		890		895
Tyr	Gly	Val	Thr	Val	Trp
		Glu	Leu	Met	Thr
			Phe	Gly	Ala
			Glu	Pro	Tyr
	900		905		910
Ala	Gly	Leu	Arg	Leu	Ala
		Glu	Val	Pro	Asp
			Leu	Leu	Glu
			Lys	Gly	Glu
	915		920		925
Arg	Leu	Ala	Gln	Pro	Gln
		Ile	Cys	Thr	Ile
		Asp	Val	Tyr	Met
			Val	Met	
	930		935		940
Val	Lys	Cys	Trp	Met	Ile
		Asp	Glu	Asn	Ile
			Arg	Pro	Thr
			Phe	Lys	Glu
	945		950		955
					960
Leu	Ala	Asn	Glu	Phe	Thr
		Arg	Met	Ala	Arg
			Asp	Pro	Pro
			Arg	Tyr	Leu
	965		970		975
Val	Ile	Lys	Arg	Glu	Ser
		Gly	Pro	Gly	Ile
			Ala	Pro	Gly
			Pro	Glu	Pro
	980		985		990
His	Gly	Leu	Thr	Asn	Lys
		Lys	Lys	Leu	Glu
			Glu	Val	Glu
			Leu	Glu	Pro
			Glu	Pro	Glu
	995		1000		1005
Leu	Asp	Leu	Asp	Leu	Asp
		Leu	Glu	Ala	Glu
			Glu	Asp	Asn
			Leu	Ala	Thr
	1010		1015		1020
Thr	Thr	Leu	Gly	Ser	Ala
		Leu	Ser	Leu	Pro
			Val	Gly	Thr
			Leu	Asn	Arg
	1025		1030		1035
					1040

Pro Arg Gly Ser Gln Ser Leu Leu Ser Pro Ser Ser Gly Tyr Met Pro  
 1045 1050 1055  
 Met Asn Gln Gly Asn Leu Gly Glu Ser Cys Gln Glu Ser Ala Val Ser  
 1060 1065 1070  
 Gly Ser Ser Glu Arg Cys Pro Arg Pro Val Ser Leu His Pro Met Pro  
 1075 1080 1085  
 Arg Gly Cys Leu Ala Ser Glu Ser Ser Glu Gly His Val Thr Gly Ser  
 1090 1095 1100  
 Glu Ala Glu Leu Gln Glu Lys Val Ser Met Cys Arg Ser Arg Ser Arg  
 1105 1110 1115 1120  
 Ser Arg Ser Pro Arg Pro Arg Gly Asp Ser Ala Tyr His Ser Gln Arg  
 1125 1130 1135  
 His Ser Leu Leu Thr Pro Val Thr Pro Leu Ser Pro Pro Gly Leu Glu  
 1140 1145 1150  
 Glu Glu Asp Val Asn Gly Tyr Val Met Pro Asp Thr His Leu Lys Gly  
 1155 1160 1165  
 Thr Pro Ser Ser Arg Glu Gly Thr Leu Ser Ser Val Gly Leu Ser Ser  
 1170 1175 1180  
 Val Leu Gly Thr Glu Glu Glu Asp Glu Asp Glu Glu Tyr Glu Tyr Met  
 1185 1190 1195 1200  
 Asn Arg Arg Arg Arg His Ser Pro Pro His Pro Pro Arg Pro Ser Ser  
 1205 1210 1215  
 Leu Glu Glu Leu Gly Tyr Glu Tyr Met Asp Val Gly Ser Asp Leu Ser  
 1220 1225 1230  
 Ala Ser Leu Gly Ser Thr Gln Ser Cys Pro Leu His Pro Val Pro Ile  
 1235 1240 1245  
 Met Pro Thr Ala Gly Thr Thr Pro Asp Glu Asp Tyr Glu Tyr Met Asn  
 1250 1255 1260  
 Arg Gln Arg Asp Gly Gly Gly Pro Gly Gly Asp Tyr Ala Ala Met Gly  
 1265 1270 1275 1280  
 Ala Cys Pro Ala Ser Glu Gln Gly Tyr Glu Glu Met Arg Ala Phe Gln  
 1285 1290 1295  
 Gly Pro Gly His Gln Ala Pro His Val His Tyr Ala Arg Leu Lys Thr  
 1300 1305 1310  
 Leu Arg Ser Leu Glu Ala Thr Asp Ser Ala Phe Asp Asn Pro Asp Tyr  
 1315 1320 1325  
 Trp His Ser Arg Leu Phe Pro Lys Ala Asn Ala Gln Arg Thr

1330

1335

1340

&lt;210&gt; 2

&lt;211&gt; 640

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2

```

Met Arg Ala Asn Asp Ala Leu Gln Val Leu Gly Leu Leu Phe Ser Leu
 1           5           10           15
Ala Arg Gly Ser Glu Val Gly Asn Ser Gln Ala Val Cys Pro Gly Thr
          20           25           30
Leu Asn Gly Leu Ser Val Thr Gly Asp Ala Glu Asn Gln Tyr Gln Thr
          35           40           45
Leu Tyr Lys Leu Tyr Glu Arg Cys Glu Val Val Met Gly Asn Leu Glu
          50           55           60
Ile Val Leu Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile
          65           70           75           80
Arg Glu Val Thr Gly Tyr Val Leu Val Ala Met Asn Glu Phe Ser Thr
          85           90           95
Leu Pro Leu Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp
          100          105          110
Gly Lys Phe Ala Ile Phe Val Met Leu Asn Tyr Asn Thr Asn Ser Ser
          115          120          125
His Ala Leu Arg Gln Leu Arg Leu Thr Gln Leu Thr Glu Ile Leu Ser
          130          135          140
Gly Gly Val Tyr Ile Glu Lys Asn Asp Lys Leu Cys His Met Asp Thr
          145          150          155          160
Ile Asp Trp Arg Asp Ile Val Arg Asp Arg Asp Ala Glu Ile Val Val
          165          170          175
Lys Asp Asn Gly Arg Ser Cys Pro Pro Cys His Glu Val Cys Lys Gly
          180          185          190
Arg Cys Trp Gly Pro Gly Ser Glu Asp Cys Gln Thr Leu Thr Lys Thr
          195          200          205
Ile Cys Ala Pro Gln Cys Asn Gly His Cys Phe Gly Pro Asn Pro Asn
          210          215          220
Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys Ser Gly Pro Gln Asp

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225                230                235                240
Thr Asp Cys Phe Ala Cys Arg His Phe Asn Asp Ser Gly Ala Cys Val
                245                250                255
Pro Arg Cys Pro Gln Pro Leu Val Tyr Asn Lys Leu Thr Phe Gln Leu
                260                265                270
Glu Pro Asn Pro His Thr Lys Tyr Gln Tyr Gly Gly Val Cys Val Ala
                275                280                285
Ser Cys Pro His Asn Phe Val Val Asp Gln Thr Ser Cys Val Arg Ala
                290                295                300
Cys Pro Pro Asp Lys Met Glu Val Asp Lys Asn Gly Leu Lys Met Cys
305                310                315                320
Glu Pro Cys Gly Gly Leu Cys Pro Lys Ala Cys Glu Gly Thr Gly Ser
                325                330                335
Gly Ser Arg Phe Gln Thr Val Asp Ser Ser Asn Ile Asp Gly Phe Val
                340                345                350
Asn Cys Thr Lys Ile Leu Gly Asn Leu Asp Phe Leu Ile Thr Gly Leu
                355                360                365
Asn Gly Asp Pro Trp His Lys Ile Pro Ala Leu Asp Pro Glu Lys Leu
                370                375                380
Asn Val Phe Arg Thr Val Arg Glu Ile Thr Gly Tyr Leu Asn Ile Gln
385                390                395                400
Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu Thr
                405                410                415
Thr Ile Gly Gly Arg Ser Leu Tyr Asn Arg Gly Phe Ser Leu Leu Ile
                420                425                430
Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser Leu Lys Glu
                435                440                445
Ile Ser Ala Gly Arg Ile Tyr Ile Ser Ala Asn Arg Gln Leu Cys Tyr
                450                455                460
His His Ser Leu Asn Trp Thr Lys Val Leu Arg Gly Pro Thr Glu Glu
465                470                475                480
Arg Leu Asp Ile Lys His Asn Arg Pro Arg Arg Asp Cys Val Ala Glu
                485                490                495
Gly Lys Val Cys Asp Pro Leu Cys Ser Ser Gly Gly Cys Trp Gly Pro
                500                505                510
Gly Pro Gly Gln Cys Leu Ser Cys Arg Asn Tyr Ser Arg Gly Gly Val
                515                520                525

```

Cys Val Thr His Cys Asn Phe Leu Asn Gly Glu Pro Arg Glu Phe Ala  
 530 535 540  
 His Glu Ala Glu Cys Phe Ser Cys His Pro Glu Cys Gln Pro Met Glu  
 545 550 555 560  
 Gly Thr Ala Thr Cys Asn Gly Ser Gly Ser Asp Thr Cys Ala Gln Cys  
 565 570 575  
 Ala His Phe Arg Asp Gly Pro His Cys Val Ser Ser Cys Pro His Gly  
 580 585 590  
 Val Leu Gly Ala Lys Gly Pro Ile Tyr Lys Tyr Pro Asp Val Gln Asn  
 595 600 605  
 Glu Cys Arg Pro Cys His Glu Asn Cys Thr Gln Gly Cys Lys Gly Pro  
 610 615 620  
 Glu Leu Gln Asp Cys Leu Gly Gln Thr Leu Val Leu Ile Gly Lys Thr  
 625 630 635 640

<210> 3

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3

Met Arg Ala Asn Asp Ala Leu Gln Val Leu Gly Leu Leu Phe Ser Leu  
 1 5 10 15  
 Ala Arg Gly Ser Glu Val Gly Asn Ser Gln Ala Val Cys Pro Gly Thr  
 20 25 30  
 Leu Asn Gly Leu Ser Val Thr Gly Asp Ala Glu Asn Gln Tyr Gln Thr  
 35 40 45  
 Leu Tyr Lys Leu Tyr Glu Arg Cys Glu Val Val Met Gly Asn Leu Glu  
 50 55 60  
 Ile Val Leu Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile  
 65 70 75 80  
 Arg Glu Val Thr Gly Tyr Val Leu Val Ala Met Asn Glu Phe Ser Thr  
 85 90 95  
 Leu Pro Leu Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp  
 100 105 110  
 Gly Lys Phe Ala Ile Phe Val Met Leu Asn Tyr Asn Thr Asn Ser Ser  
 115 120 125

His Ala Leu Arg Gln Leu Arg Leu Thr Gln Leu Thr Glu Ile Leu Ser  
 130 135 140  
 Gly Gly Val Tyr Ile Glu Lys Asn Asp Lys Leu Cys His Met Asp Thr  
 145 150 155 160  
 Ile Asp Trp Arg Asp Ile Val Arg Asp Arg Asp Ala Glu Ile Val Val  
 165 170 175  
 Lys Asp Asn Gly Arg Ser Cys Pro Pro Cys His Glu Val Cys  
 180 185 190

<210> 4

<211> 1914

<212> DNA

<213> Homo sapiens

<400> 4

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gtgggcaact ctcaggcagt gtgtcctggg actctgaatg gcctgagtgat gaccggcgat	120
gctgagaacc aataccagac actgtacaag ctctacgaga ggtgtgaggt ggtgatgggg	180
aaccttgaga ttgtgctcac gggacacaat gccgacctct ccttcctgca gtggattcga	240
gaagtgcacg gctatgtcct cgtggccatg aatgaattct ctactctacc attgcccac	300
ctccgcgtgg tgcgagggac ccaggtctac gatgggaagt ttgccatctt cgtcatgttg	360
aactataaca ccaactccag ccacgctctg cgccagctcc gcttgactca gctcaccgag	420
attctgtcag ggggtgttta tattgagaag aacgataagc tttgtcacat ggacacaatt	480
gactggaggg acatcgtgag ggaccgagat gctgagatag tgggtgaagga caatggcaga	540
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tgccagacat tgaccaagac catctgtgct cctcagtgtg atggtcactg ctttggggccc	660
aaccccaacc agtgctgcca tgatgagtggt gccgggggct gctcaggccc tcaggacaca	720
gactgctttg cctgccggca cttcaatgac agtggagcct gtgtacctcg ctgtccacag	780
cctcttgtct acaacaagct aactttccag ctggaacca atccccacac caagtatcag	840
tatggaggag tttgtgtagc cagctgtccc cataactttg tgggtgatca aacatcctgt	900
gtcagggcct gtcctcctga caagatggaa gtagataaaa atgggctcaa gatgtgtgag	960
ccttgctggg gactatgtcc caaagcctgt gagggaacag gctctgggag ccgcttcag	1020
actgtggact cgagcaacat tgatggattt gtgaactgca ccaagatcct gggcaacctg	1080
gactttctga tcaccggcct caatggagac ccctggcaca agatccctgc cctggaccca	1140
gagaagctca atgtcttccg gacagtacgg gagatcacag gttacctgaa catccagtcc	1200
tggcgccccc acatgcacaa cttcagtggt ttttccaatt tgacaacat tggaggcaga	1260
agcctctaca accggggctt ctcattgttg atcatgaaga acttgaatgt cacatctctg	1320

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ggcttccgat ccctgaagga aattagtgtt gggcgatatct atataagtgc caataggcag 1380
ctctgtctacc accactcttt gaactggacc aagggtgttc gggggcctac ggaagagcga 1440
ctagacatca agcataatcg gccgcgcaga gactgcgtgg cagagggcaa agtgtgtgac 1500
ccactgtgtt cctctggggg atgtctgggg ccaggccctg gtcagtgtt gtctgtctga 1560
aattatagcc gaggaggtgt ctgtgtgacc cactgcaact ttctgaatgg ggagcctcga 1620
gaatttgccc atgaggccga atgcttctcc tgccaccgga aatgccaaacc catggagggc 1680
actgccacat gcaatggctc gggctctgat acttgtgtc aatgtgcca tttctgagat 1740
ggggcccaact gtgtgagcag ctgcccccat ggagtcctag gtgccaaggg cccaatctac 1800
aagtaccag atgttcagaa tgaatgtcgg ccctgccatg agaactgcac ccaggggtgt 1860
aaaggaccag agcttcaaga ctgttttaga caaacactgg tgctgatcgg caaa 1914

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&lt;210&gt; 5

&lt;211&gt; 475

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5

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gatcctgtcc tgggactctg aatggcctga gtgtgaccgg cgatgctgag aaccaatacc 60
agacactgta caagctctac gagaggtgtg aggtggtgat ggggaacctt gagattgtgc 120
tcacgggaca caatgccgac ctctccttcc tgcagtggat tcgagaagtg acaggctatg 180
tcctcgtggc catgaatgaa ttctctactc taccattgcc caacctccgc gtggtgagag 240
ggacccaggt ctacgatggg aagtttgcca tcttcgtcat gttgaactat aacaccaact 300
ccagccacgc tctgcgccag ctccgcttga ctgagctcac cgagattctg tcaggggggtg 360
tttatattga gaagaacgat aagctttgtc acatggacac aattgactgg agggacatcg 420
tgagggaccg agatgctgag atagtgtgga aggacaatgg cagaagctga ctgca 475

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&lt;210&gt; 6

&lt;211&gt; 19

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Primer

&lt;400&gt; 6

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tctgcggagt catgagggc 19

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<210> 7  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 7  
tgtgaccacg actagccgtt tctgatgttc ctgctactgc tgttcact 48

<210> 8  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 8  
tctagagatt ttctgcggag tcatg 25

<210> 9  
<211> 15  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 9  
gacgacgacg acaag 15

<210> 10  
<211> 16  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Primer

<400> 10

gccatggctg atatcg

16

<210> 11

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 11

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<210> 12

<211> 19

<212> DNA

<213> Artificial Sequence

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<223> Primer

<400> 12

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19

<210> 13

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

&lt;400&gt; 13

aggctcccca ttcagaaag

19

&lt;210&gt; 14

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 14

Arg	Gln	Leu	Cys	Tyr	His	His	Ser	Leu	Asn	Trp	Thr	Lys	Val	Leu	Arg
1			5						10					15	
Gly	Pro	Thr	Glu	Glu	Arg	Leu	Asp	Ile	Lys	His	Asn	Arg	Pro	Arg	Arg
			20					25					30		
Asp	Cys	Val	Ala	Glu	Gly	Lys	Val	Cys	Asp	Pro	Leu	Cys	Ser	Ser	Gly
		35					40					45			
Gly	Cys	Trp	Gly	Pro	Gly	Pro	Gly	Gln	Cys	Leu	Ser	Cys	Arg	Asn	Tyr
	50					55				60					
Ser	Arg	Gly	Gly	Val	Cys	Val	Thr	His	Cys	Asn	Phe	Leu	Asn	Gly	Glu
65				70						75				80	
Pro	Arg														

&lt;210&gt; 15

&lt;211&gt; 456

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 15

atggtttgtg	tagccagctg	tcccataac	tttgtggtgg	atcaaacatc	ctgtgtcagg	60
gcctgtcctc	ctgacaagat	ggaagtagat	aaaaatgggc	tcaagatgtg	tgagccttgt	120
gggggactat	gtcccaaagc	ctgtgaggga	acaggctctg	ggagccgctt	ccagactgtg	180
gactcgagca	acattgatgg	atttgtgaac	tgaccaaga	tcctgggcaa	cctggacttt	240
ctgatcaccg	gcctcaatgg	agaccctgg	cacaagatcc	ctgccctgga	cccagagaag	300
ctcaatgtct	tccggacagt	acgggagatc	acaggttacc	tgaacatcca	gtcctggccg	360
ccccacatgc	acaacttcag	tgttttttcc	aatttgacaa	ccattggagg	cagaaagctt	420
gcggccgcac	tcgagcacca	ccaccaccac	cactga			456

&lt;210&gt; 16

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 16

```

Met Val Cys Val Ala Ser Cys Pro His Asn Phe Val Val Asp Gln Thr
1           5           10           15
Ser Cys Val Arg Ala Cys Pro Pro Asp Lys Met Glu Val Asp Lys Asn
          20           25           30
Gly Leu Lys Met Cys Glu Pro Cys Gly Gly Leu Cys Pro Lys Ala Cys
          35           40           45
Glu Gly Thr Gly Ser Gly Ser Arg Phe Gln Thr Val Asp Ser Ser Asn
          50           55           60
Ile Asp Gly Phe Val Asn Cys Thr Lys Ile Leu Gly Asn Leu Asp Phe
65           70           75           80
Leu Ile Thr Gly Leu Asn Gly Asp Pro Trp His Lys Ile Pro Ala Leu
          85           90           95
Asp Pro Glu Lys Leu Asn Val Phe Arg Thr Val Arg Glu Ile Thr Gly
          100          105          110
Tyr Leu Asn Ile Gln Ser Trp Pro Pro His Met His Asn Phe Ser Val
          115          120          125
Phe Ser Asn Leu Thr Thr Ile Gly Gly Arg Ser Leu Tyr Asn Arg Gly
          130          135          140
Phe Ser Leu Leu
145

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